

ON COPPER  
HER VANES.



MASSACHUSETTS PLUGHMAN  
OFFICIAL ORGAN OF THE N. E. AGRICULTURAL SOCIETY.  
PUBLISHED WEEKLY.  
At 12 North Market Street, Boston.  
(Opposite Faneuil Hall.)  
GEO. RICE, Proprietor and Publisher.  
TERMS: \$2.50 per annum in advance. \$5.00 for 6 months. Single copies 10 cents. Foreign postage extra. Advertisements as usual.

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CONSTIPATION,  
BILIOUSNESS,  
HEADACHE,  
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RHEUMATISM,  
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BRUISES,  
SCALDS,  
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THE WORLD.  
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simple, durable,  
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DYSPEPSIA,  
INDIGESTION,  
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# THE NEW ENGLAND AGRICULTURE

VOLUME XXX: NO. 26. BOSTON, SATURDAY, JUNE 3, 1871. WHOLE NUMBER 1542.

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**Editorial.**  
JUNE ON THE FARM.  
Hoeing and weeding are the most pressing jobs for those who have finished planting, and we take it all good farmers have got far ahead with corn and potatoes, and most of the staple crops. Those who maintain that it is of little use to plant till the land is warm can hardly make that excuse so late as this. As to mangolds they should have been in the ground by the first of May, and the corn and other crops should be in the ground by the first of June. It is a good plan to run the cultivator through the corn and other crops as often as a week. It saves a great deal of hand hoeing, and keeps the weeds down. A good cultivator is one of the most important implements on the farm. It is handy to use whenever there is a hole to spare from the work.

**THE AGRICULTURAL COLLEGE.**  
We have the pleasure of announcing that the Legislature did what we stated two or three weeks ago, to be done. The sum of \$300,000, making it practically up to what it would have been the last year, is appropriated to the college. It will give the college a permanent income from the fund of twelve to fifteen thousand a year and the Institute six to eight thousand, perhaps more, besides increasing the facilities for accommodating more students, and the college will be able to create the income from that source. The college ought therefore hereafter to be self-supporting.

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**MORE ABOUT THE CURRANT WORM.**  
The worm presented in our last week's Ploughman, was an imported pest. But we have "native" ones to contend with. One of these is described in Dr. Packard's paper, in the report of the Secretary of the State Board of Agriculture, under the head of "The Native Currant Saw Fly." As this species may be confounded with the European saw fly, though belonging to a different genus, the following description is given, as it is extracted from my Guide to the Study of Insects.

This saw fly (Fig. 1, a, larva; b, female, from the "American Entomologist"; (P. grossulariae of Walsh.) is a widely distributed species in the Northern and Western States, and injures the currant and gooseberry. The female fly is shining black, while the head is dull yellow, and the legs are honey yellow, with the tips of the hind tibiae, and sometimes the extreme tips of the hinder tibiae, and of the tarsal joints, pale dusky for a quarter of their length. The wings are partly yellow, with black veins, a honey yellow costae, and a dusky stigma, edged with honey yellow. The male differs a little in having black legs. Mr. Walsh states that the larva is a pale green worm, half an inch long, with a black head, which becomes green after the last moult, but with a lateral brown stripe meeting with the opposite one on the top of the head, where it is more confluent; and a central brown black spot on its face. It appears the last of June and early in July, and a second brood in August. They spin their cocoons on the bushes on which they feed, and the fly appears in two or three weeks, the specimens reared by him flying on the 20th of August. This worm may at once be distinguished from the imported currant worm, by the absence of the minute black warts that cover the body of the latter. The same remedies should be used for this worm as are recommended for the preceding insect.

**The Currant Spun Worm.** (Fig. 2, moth; Fig. 3, 1, 2, caterpillar, 3, pupa, from the "American Entomologist.") Many persons in speaking of the "currant worm" have mistaken the caterpillar for the moth. The caterpillar is a small, green, worm-like creature, with a black head, and a black stripe down its back. The moth is a small, brown, winged creature, with a black head, and a black stripe down its back. The pupa is a small, brown, winged creature, with a black head, and a black stripe down its back.

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**IMPROVEMENT OF PASTURE LANDS.**  
A PRIZE ESSAY.  
BY ALEXANDER HYDE.  
Awarded the First Prize by a Committee of the New England Agricultural Society in 1870.

When pastures have become exhausted of those elements of fertility which grasses demand for luxuriant growth, a change of procedure gradually occurs. A notion of crop rotation is by no means of man's device. Nature evidently practised upon this principle long before Adam came upon the stage of action, and we see the process everywhere going on around us now without the intervention of man. Thus the meadows and bitches which are now in their turn dry, and their places are supplied by their precursors, the pines. Nature abhors a vacuum, and when the food of one kind (if a plant is exhausted) the plant first becomes dwarfed, and finally dies from starvation, and another variety takes its place, requiring a different kind of soil, and a different kind of manure. Thus the meadows and bitches which are now in their turn dry, and their places are supplied by their precursors, the pines. Nature abhors a vacuum, and when the food of one kind (if a plant is exhausted) the plant first becomes dwarfed, and finally dies from starvation, and another variety takes its place, requiring a different kind of soil, and a different kind of manure.

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**JERSEY COW "ROSA."**  
PROPERTY OF CHARLES L. SHARPLES, OF PHILADELPHIA.

**Horticulture.**  
**STRAWBERRIES ATTRACTIVE IN MARKET.**  
The following remarks by A. M. Purdy, are worthy the attention of every man who wishes to sell strawberries for a good price: "I would say that fruit that has a high color, glossy and bright, always sells well, even if but ordinary size, hence it behooves every grower to give his fruit this peculiar luster or gloss. This can only be done by heavy manuring with coarse litter like straw or hay. This keeps the surface moist, and prevents the sun's reflection from burning the fruit, and giving it that dull, dead appearance which is so common in the market. Hence we see in closely grazed pastures the dried roots of the grasses lying scattered over the surface. If the roots are not eradicated, leaves are not left in sufficient quantity to vitalize the soil, and keep up the vigor of the grasses. The great object, leaving a good growth of grass on the meadows and pastures in the fall, is not so much to protect the roots from cold, as to give them vital energy for a vigorous start the succeeding season. Pastures, like the soil, may renew their strength from year to year, but like the soil, they need something to live upon, and [to be continued.]

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A close-up photograph showing a vertical crack in the bottom flange of a pipe joint. The crack is located at the bottom center of the flange, extending upwards into the pipe body. The flange is dark and metallic, and the pipe body is lighter and textured.